

## **EXHIBIT A**

### **AMENDMENTS TO CLAIMS**

This listing of claims will replace all prior versions, and listings, of Claims in the application:

#### **Listing of Claims:**

Claims 1 to 16 (Canceled).

17. (Currently Amended) A method of determining the interconnectivity of a plurality of data ports, said method comprising:

transmitting a connectivity interrogation signal to a first socket contact proximate a first data port;

transmitting said connectivity interrogation signal over a dedicated conductor incorporated into a patch cord to a second socket contact proximate a second data port;

receiving a connectivity response signal from asaid second socket contact proximate asaid second data port; and

interpreting said connectivity response signal from said second socket contact to identify a connectivity between said first socket contact and said second socket contact.

18. (Currently Amended) A method as claimed in claim 17, wherein said connectivity response signal is the same as said connectivity interrogation signal.

19. (Previously Presented) A method as claimed in claim 17, wherein said interpreting is done by a software component.

20. (Previously Presented) A method as claimed in claim 17, further comprising generating an output signal indicative of said connectivity between said first socket contact and said second socket contact.

21. (Previously Presented) A method as claimed in claim 20, further comprising transmitting said output signal to a local area network.

22. (Previously Presented) A method as claimed in claim 20, further comprising transmitting said output signal to a computer monitor.

23. (Previously Presented) A method as claimed in claim 17, wherein said connectivity response signal indicates that said first socket contact is not electrically coupled to said second socket contact.

24. (Previously Presented) A method as claimed in claim 17, wherein said connectivity response signal indicates that said first socket contact is electrically coupled to said second socket contact.

25. (Previously Presented) A method as claimed in claim 17, further comprising transmitting a second connectivity interrogation signal to a third socket contact proximate a third data port.

26. (Previously Presented) A method as claimed in claim 17, further comprising storing said connectivity response signal.

27. (Previously Presented) A method as claimed in claim 17, wherein said first data port is located on a first hardware component and said second data port is located on a second hardware component.

28. (Currently Amended) A method as claimed in claim 1727, wherein said first hardware component and said second hardware component are each patch panels.

29. (Canceled)

30. (Currently Amended) A method of determining the interconnectivity of a plurality of data ports, each of said data ports having a socket contact positioned proximate

thereto, wherein each socket contact is electrically coupled to an output driver and an input latch, said method comprising:

transmitting a connectivity interrogation signal to a first socket contact proximate a first data port; ~~and~~

transmitting said connectivity interrogation signal over a dedicated conductor incorporated into a patch cord to a second socket contact proximate a second data port; and

scanning ~~said~~ plurality of input latches for an indication of receipt of said connectivity interrogation signal at a second socket contact proximate a second data port.

31. (Previously Presented) A method as claimed in claim 30, further comprising recording said indication of receipt of said connectivity interrogation signal.

32. (Previously Presented) A method claimed in claim 31, wherein said indication of receipt indicates that said first socket contact is electrically coupled to said second socket contact.

33. (Previously Presented) A method as claimed in claim 31, wherein said indication of receipt indicates that said first socket contact is not electrically coupled to said second socket contact.

34. (Previously Presented) A method as claimed in claim 30, further comprising generating an output signal indicative of said indication of receipt.

35. (Currently Amended) A method of determining the interconnectivity of a plurality of data ports, each of said data ports having a socket contact positioned proximate thereto, wherein each socket contact is electrically coupled to a single output driver and a single input latch, said method comprising:

transmitting a first connectivity interrogation signal from a first output driver to a first socket contact;

determining which input latch among ~~the~~ plurality of input latches receives said first connectivity interrogation signal.

36. (Previously Presented) A method as claimed in claim 35, further comprising transmitting a second connectivity interrogation signal from a second output driver to a second socket contact, and determining which input latch among the plurality of input latches receives said second connectivity interrogation signal.

37. (Currently Amended) A method as claimed in claim 35, further comprising transmitting a connectivity interrogation signal from each additional output driver among ~~the~~ plurality of output drivers to ~~it~~each of said plurality of output drivers' associated socket contact and determining which input latch among the plurality of input latches receives each of said connectivity interrogation signal.

38. (Currently Amended) A method of determining the interconnectivity of a plurality of data ports, at least two of which are interconnected by a data transmission cable, each of said data ports having a socket contact positioned proximate thereto, wherein each socket contact is electrically coupled to an output driver and an input latch, said method comprising:

designating an output driver as a first output driver, designating the socket contact coupled to said first output driver as a first socket contact, designating an input latch coupled to said first socket contact as a first input latch, and designating a data port associated with said first socket contact as a first data port, wherein said designating comprises a designation scheme;

transmitting a signal from said first output driver to said first socket contact ~~so as to place~~thereby placing said first socket contact at a high state; and

scanning said input latches for a latch having a high state to determine the connectivity state of said first data port.

39. (Previously Presented) A method as claimed in claim 38, further comprising designating an output driver as a second output driver, designating the socket contact coupled to said second output driver as a second socket contact, designating an input latch coupled to said second socket contact as a second input latch, and designating a data port associated with said second socket contact as a second data port.

40. (Currently Amended) A method as claimed in claim 39, further comprising transmitting a signal from said second output driver to said second socket contact ~~so as to place~~thereby placing said second socket contact at a high state; and

scanning said input latches for a latch having a high state to determine the connectivity state of said second data port.

41. (Currently Amended) A method as claimed in claim 38, further comprising designating the remaining output drivers, socket contacts, input latches and data ports ~~with the same designation scheme according to said designation scheme~~.

42. (Currently Amended) A method as claimed in claim 41, further comprising transmitting signals from each remaining output driver to each remaining sock contact to determine the connectivity state of each of said plurality of data ports.